

Service Date: March 8, 1993

DEPARTMENT OF PUBLIC SERVICE REGULATION  
BEFORE THE MONTANA PUBLIC SERVICE COMMISSION  
OF THE STATE OF MONTANA

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IN THE MATTER OF The Application     )     UTILITY DIVISION  
of Northwestern Telephone Systems,    )  
Inc., dba PTI Communications, for     )     DOCKET NO. 92.7.32  
Approval of Revised Rates; Tariff     )  
Advice No. 92-03.                     )     ORDER NO. 5638c

FINAL ORDER

BEFORE:

BOB ROWE, Chairman  
DANNY OBERG, Commissioner  
DAVE FISHER, Commissioner

FINDINGS OF FACT

1. On July 1, 1992, Pacific Telecom, Inc. (PTI) filed a general rate case proposing an overall revenue reduction of \$434,857. This request included an overall cost of capital of 11.96 percent. On October 13, 1992, the Montana Consumer Counsel (MCC) filed testimony which advocated a rate reduction of \$1,954,423. MCC's testimony included an overall cost of capital of 9.65 percent. PTI and MCC were the only parties to file testimony on revenue requirements issues in this Docket.

2. On December 18, 1992, the Montana Consumer Counsel filed a Revenue Requirement Stipulation with the Commission, signed by MCC and PTI, a copy of which is attached hereto as Exhibit "A" and incorporated herein by this reference.

3. On December 22, 1992, PTI filed a Rate Structure Stipulation with the Commission. A fully executed original, signed by MCC, PTI, USWC, and the Whitefish Chamber of Commerce, was filed on December 31, 1992, a copy of which is attached hereto as Exhibit "B" and incorporated herein by this reference.

4. A Stipulation signed by PTI and the Payphone Company was submitted to the Commission during the hearing on January 13, 1992, as PTI Exhibit No. 4, a copy of which is attached hereto as

Exhibit "C" and incorporated herein by this reference.

5. On January 13, 1993, starting at 9:00 a.m. the Commission held a public hearing in this Docket. A satellite hearing was held at 7:00 p.m. on January 12, 1993, to take public testimony and comments.

6. The revenue requirement stipulation received on December 18, 1992, resolved all revenue requirements issues in this Docket and recommended an overall revenue reduction of \$1,300,000. Included in the stipulation was an agreement between PTI and MCC on the treatment of Other Post Employment Benefits (OPEBs). The parties agreed that the OPEB issue should be resolved in the same manner as it was in the recent U S West Communications (USWC) rate case (Docket No. 90.12.86). PTI and MCC also agreed in the stipulation that the \$1,300,000 reduction in revenues should be accomplished in part by reducing revenues from carrier access charges by \$500,000.

7. After a review of the entire record in this Docket the Commission finds that the stipulation between PTI and MCC represents a well reasoned agreement with respect to the revenue requirement issues in this Docket. The revenue reduction of \$1,300,000 represents a direct benefit to the customers of PTI (including interexchange carriers), addresses the proper ratemaking treatment for OPEB expenses, and indirectly reflects the current cost of capital while still allowing PTI the opportunity to earn a fair rate of return. The Commission finds that the stipulation between PTI and MCC is in the public interest and approves it as filed.

8. The Commission makes the following Findings of Fact with respect to how PTI treats OPEB expenses.

9. PTI and MCC agreed that in the event the treatment of OPEBs was reversed or overturned in the USWC case, PTI's annual revenues would be reduced by an additional \$200,000. As of the date of this Order, the deadline for seeking judicial review of the OPEB decision in Docket 90.12.86 had passed.

10. Findings Of Fact 54-84 in Order 5535g (USWC Docket 90.12.86) pertained to the OPEB issue. The Commission finds that PTI will be subject to the same requirements that the Commission ordered for USWC.

11. The Commission finds that PTI shall be allowed to recover in rates the amount of the FAS 106 accrual which is tax deductible.

12. The Commission finds funding mandatory. The Commission finds the use of an external trustee and a tax advantaged trust mandatory. All funds recovered in rates, for OPEBs, shall be deposited into an external trust and receive tax advantaged treatment. The trust shall restrict the use of funds exclusively for the payment of OPEB benefits.

13. Upon termination of the trust and/or termination of all benefits plans providing OPEBs, all excess funds shall be refunded to ratepayers.

14. Should PTI terminate a portion of the benefit plans which provide OPEBs, PTI shall present information to the Commission detailing which benefit plans were terminated, and which benefit plans remain. PTI may provide reasons why existing funds should not be refunded to ratepayers.

15. The Commission finds all OPEB funding by the Montana ratepayers shall be tracked in a separate subaccount. There shall be a reasonable, proportional allocation of the total investment returns to the Montana subaccount.

16. In order to match the expense with the service rendered, the Commission finds that in the event a segment of the PTI business that is currently regulated becomes deregulated, a portion of the funding that has been received shall be transferred to the deregulated entity. The Commission recognizes that funding is not done on an individual employee basis. However, the amount transferred shall represent a reasonable allocation of funding that has been done for the employees in question. Equally important, 100 percent of the total OPEB liability for these employees shall also be transferred to the deregulated entity. The Commission recognizes that the liability for these employees may be greater than the amount of funding being transferred. Any funding shortfalls shall be absorbed by the deregulated entity. All transfers shall be presented in a rate case, and reviewed by the Commission for reasonableness.

17. The Commission expects PTI to do everything possible to continue to control costs associated with OPEBs. The Commission

will monitor cost containment measures through the PSC annual report. In addition, the Commission encourages PTI to continue exploring tax advantaged alternatives for the funding of OPEBs.

18. The Commission has not reviewed the level of benefits or the benefit programs offered by PTI. The Commission retains the right to review, in future dockets, the level of programs offered by PTI.

19. The Commission emphasizes the conclusions reached in this Docket pertaining to OPEBs apply solely to PTI. The rapidly changing health care environment, the differing nature of OPEB benefits offered and the appropriateness of each Utility's management decisions to control these costs now and in the future, all require a review of each utility on a case-by-case basis.

#### COST OF SERVICE

20. This section examines how marginal costs are defined. A cost of service model involves many steps to arrive at final prices. Table 1, below, illustrates the general costing steps involved. The production process is first defined by cost functions. Cost functions can be thought of as the source of costs; the cost function describes a process which causes costs to be incurred. The components which make up the cost functions are generally classified based on the product produced, i.e., access to the switched network or a speech link through the switch. Classified costs may be further refined to reflect time of use. Customer classes are designed to efficiently aggregate customers with similar cost causing characteristics.

TABLE 1  
General Cost of Service Model

Functionalization  
    Switch  
    Transmission  
    Distribution  
    Customer  
Classification  
    Access-  
    \$/line  
    Usage-  
    \$/ccs

Customer-  
\$/cust/mo  
Allocation  
Time of use  
Customer classes  
Reconciliation  
Equal percent or other market based  
Pricing  
\$/month  
>/minute of use

#### PTI COST OF SERVICE

21. PTI computed the incremental costs associated with providing additional units of basic access to, and usage of, the PTI Montana network. According to PTI's cost study, basic access and usage are the primary products produced by PTI. The functionalization of PTI's network facilities costs and classification of those costs is discussed below.

#### FUNCTIONALIZATION

22. PTI's cost study identifies four cost functions: 1) customer costs, 2) loop costs, 3) switch costs and 4) interoffice transport costs. PTI's cost functions correspond to the Commission's cost model presented in Table 1, above, as follows. PTI's loop cost function is the Commission's distribution cost function. PTI's interoffice transport cost function is the Commission's transmission cost function. PTI's switch cost and customer cost functions are consistent with the Commission's switch cost and customer cost functions.

#### CUSTOMER COST FUNCTION

23. PTI's customer cost function includes the costs of maintaining customer drop lines and managing customer accounts for billing. These costs can be considered incremental because they can be avoided if a customer discontinues service; the cost of providing an additional access line will include these costs. The drop line itself is not considered avoidable and thus its cost is not considered incremental. Test year expenses related to drop line maintenance and customer accounts are divided by the

number of customers to arrive at a cost per customer per year. This cost is classified as a customer cost and allocated to customers on a dollars per customer per month basis.

#### LOOP COST FUNCTION

24. PTI's loop cost function is based on an opportunity cost concept. A customer's decision to subscribe to service forces a cable pair (access line) to be dedicated to that customer. As long as the customer continues to subscribe to service, the access line cannot be used to provide service to any other customer. PTI identifies an opportunity cost value for the loop which is used as a proxy for the incremental cost of a single access line.

25. PTI first separates the loop into two components, the feeder cable portion and the distribution cable portion. PTI defines distribution cable to be all cable with less than 100 pairs. Any cable with 100 or more pairs of copper wire is defined as feeder cable. PTI states that the 100 pair threshold is based on engineering judgement and the relationship between cable cost and installation cost (at a certain cable cost it becomes more cost effective on a present value basis to plan to reinforce the cable periodically rather than install it all at once). PTI determines the opportunity cost associated with each of the two loop portions.

26. PTI states that the distribution cable portions of the loop are designed to have sufficient capacity to meet any demand growth which may occur over the entire life of the cable. Therefore, PTI claims, additional demand for access does not cause a need for capacity additions to existing distribution cable. Hence, use of distribution cable does not result in an opportunity cost. Therefore, PTI assigns a zero incremental cost value to distribution cable.

27. Feeder cable, on the other hand, is periodically reinforced with additional lines in order to maintain sufficient capacity to satisfy all customers' demands. Because of the way the feeder portion is designed, if one customer discontinued service the free feeder line could be reassigned to another

customer. Thus, continued use of a feeder line by any given customer results in an opportunity cost. This opportunity cost is proxied by the cost of adding an average feeder line to the loop. But feeder addition occurs in increments larger than a single line. The incremental cost per line is derived by dividing the total investment required for the addition of an average length of feeder cable by the usable capacity (in terms of individual lines) provided by the addition, as described below.

28. Feeder cable cost is a function of the cable size (expressed by number of pairs or individual lines), the wire gauge used for the cable pairs and the length of the cable. PTI describes its network of feeder cable in terms of three cable sizes: 600 pair, 200 pair and 100 pair. The wire used in each cable size may be one of three wire gauges: 26, 24 or 22. For each of the above cable sizes, PTI develops a weighted average cost per kilofoot (kf) based on wire gauge. A cost per kf per line for each of the cable sizes is developed by dividing the cost per kf by the usable capacity of each cable size. PTI defines usable capacity to be 75% of the cable size. Thus, if the capacity addition is a segment of 600 pair cable the usable capacity provided is 75% of 600 or 450 pairs. PTI then uses the distribution of cable by size in each exchange to develop a total weighted average cost per line for feeder cable. This cost is annualized with a real carrying charge, classified as an access cost and allocated to customers on a dollars per line per month basis.

#### SWITCH COST FUNCTION

29. PTI computes incremental costs for each of four functional switch components: line peripheral equipment, trunk peripheral equipment, the switch matrix and the central processor. PTI provided Bell Communications Research (Bellcore) detailed information on each of its switches, including all remote switches. Bellcore inputs this information into its Switching Cost Information System (SCIS) model. The SCIS model computes the cost of expanding the capacity of each functional

category. The methodology the SCIS model uses to calculate incremental costs is termed the capacity cost approach. This approach appears to be based on the concept of avoidable cost and assumes that existing capacity is exhausted in periods of peak demand necessitating a capacity addition to each switch component. In other words, peak usage is assumed to be causally responsible for the addition of a discrete unit of capacity which could conceivably be avoided if peak use was foregone. Capacity additions to each of the functional switch components are assumed to be modular in nature and can be installed independent of the other components. The capacity cost approach defines average, per unit incremental cost as the annualized cost of the modular capacity addition divided by the usable capacity provided by the modular capacity addition, plus per unit operating expenses. This formula is written algebraically as:

$$\begin{array}{lcl} \text{Average} & \text{annualized investment cost} & \text{per unit} \\ \text{Incremental} & = & \text{usable capacity} + \\ \text{operating} & & \\ \text{cost} & & \text{expenses} \end{array}$$

The SCIS model provides the results of dividing the cost of a modular capacity addition by the usable capacity. PTI annualizes this number using a real carrying charge. The per unit operating costs are incorporated into PTI's carrying charges. Following is a brief illustration of how the capacity cost approach is applied to each functional switch component.

#### LINE PERIPHERAL EQUIPMENT

30. All access lines terminate into the switching network through line peripheral equipment. Line peripheral equipment performs two functions. First, it provides a physical link between the customer's access line and switch network. Second, it condenses multiple analog signals into single digital signals which then flow into the switch matrix. Additional capacity to perform each function can be added separately and modularly. PTI classifies the first function as access related while the second function is classified as usage related. The SCIS model uses proprietary vendor price lists to calculate the investment cost



required for a capacity addition to each line peripheral function. The investment cost is divided by the usable capacity provided. PTI then applies its carrying charges to compute the average per unit incremental cost for each line termination function. The access cost is allocated to customers on a \$/line/month basis. The usage cost may be recovered either in a per minute usage rate or in the flat monthly rate, depending on the rate design.

#### TRUCK PERIPHERAL EQUIPMENT

31. Trunk peripheral equipment is used to link the switch matrix with interoffice transport facilities. As with line termination equipment, SCIS uses vendor prices to determine the incremental trunk termination cost by dividing the cost of a modular trunk peripheral capacity addition by its usable capacity. Incremental trunk peripheral equipment is classified as usage related and expressed in terms of dollars per centum call second (ccs. ccs is primary measure of usage. One ccs is equivalent to 100 call seconds). The cost per ccs is allocated to customers through either per minute usage rates or as part of the monthly access rate.

#### SWITCH MATRIX

32. The switch matrix provides the path that links a calling customer's access line to the access line belonging to the called party or to interoffice facilities if the called party is not served from the same switch. Again, SCIS uses vendor prices to calculate the cost of adding switch matrix capacity. The capacity cost approach is applied to determine the incremental cost on a dollars per ccs basis. The cost is allocated to customers through per minute usage rates or as part of the monthly access rate.

#### CENTRAL PROCESSOR

33. The central processor of the switch is responsible for

monitoring access lines and setting up communication pathways through the switch matrix and maintaining these pathways for the duration of the call. PTI assumes that the central processor capacity of all its switches have sufficient capacity to last to the end of their useful lives. Thus, no capacity additions will result from growth in demand for basic access or usage and no opportunity cost exists. Therefore, PTI assigns a zero incremental cost to the central processor component of the switch function.

#### INTEROFFICE TRANSPORT COST FUNCTION

34. PTI's interoffice transport cost includes costs associated with transporting messages between the main DMS10 and DMS100 switches as well as the cost of transmitting messages between the many remote switches and the main switches. The initial investment in fiber optic cable and the associated electronic equipment (i.e. multiplexing equipment) for interoffice and umbilical transport is large compared to the investment needed to expand capacity once the initial facilities are in place. PTI again appears to use the capacity cost approach to calculate the incremental cost of interoffice transport. However, interoffice transport costs were developed completely by PTI; Bellcore's SCIS model was not used.

35. PTI's two main switches are manufactured by Northern Telecom and include a DMS100 in Kalispell and a DMS10 in Polson. Additional capacity on the transport segment between these two switches can be accomplished by adding modular multiplexing equipment. The additional capacity is expressed in terms of additional ccs provided. The investment cost of the multiplexing units (one is needed for each end of the fiber optic transport line) plus PTI engineering and labor is annualized using a real carrying charge and divided by the usable ccs provided to arrive at the incremental cost per ccs. The same method is applied to the umbilical transport segments. Since not all calls require interoffice transport, PTI develops a weighted average cost based on the percentage of intra PTI service area calls that require interoffice transport. This cost is classified as usage related,

however the final incremental cost is so small (about 1/1000 of a cent per minute) that PTI considers it zero for practical purposes.

36. The above incremental cost analyses combine to yield an incremental cost of access of about \$8.00 per line per month and a minor incremental usage cost (Exhibit PTI-2 p 22).

#### DIRECTORY ASSISTANCE

37. PTI States that its directory assistance service (DA) cost is a function of two elements. First, PTI contracts with USWC for requests for listings outside the PTI service area. The cost to PTI for these requests is equal to the price charged by USWC. Second, PTI computes the incremental cost of a request for a listing within the PTI service area. The incremental cost is based on avoidable operator labor, fungible computer equipment and other DA station equipment, transport and switching and billing and collection costs. Using these two cost elements, PTI calculates a weighted average cost per DA request.

#### COIN MESSAGE SERVICE

38. PTI's coin message service cost is a function of four cost elements: 1) access to the switch network, 2) usage costs, which consist of switching and interoffice transport costs, 3) collection costs and 4) the annualized capital cost of the coin station and recurring maintenance costs.

39. The incremental loop, switch and interoffice transport costs already discussed above were used as the basis for incremental access and usage costs. PTI bases the incremental loop cost on the average loop length associated specifically with coin stations. The collection cost is primarily a function of labor cost. A real carrying charge which includes a maintenance expense factor is applied to the investment cost of a coin station to compute the station cost element.

#### TOUCHCALL AND MILEAGE CHARGES

40. In the Commission's Final Order 5543b PTI was directed to file testimony and updated cost studies regarding its proposal in Docket No. 90.6.36 to eliminate Touchcall and mileage charges. PTI did not file an updated cost study for Touchcall service. However, PTI's testimony states that, at its current switch BCS (Bulk Change Supplement) level, there is no additional cost associated with providing Touchcall (Exhibit PTI-2 p 41). BCS refers to regular updates and improvements to switch models. These updates and improvements are made regularly by the switch manufacturer and generally affect switching software but may also affect hardware. When PTI originally filed its touchcall proposal in Docket No. 90.6.36, its switches were at BCS level 26. PTI states that currently its DMS100 switch is at level 32.

41. With respect to mileage charges, PTI states that its incremental loop cost study provides a "comprehensive examination of loop cost." (Exhibit PTI-2 p 42)

#### KEY SYSTEMS AND PBXS

42. Final Order 5543b also directed PTI to provide cost justification for aligning its Key system and PBX prices. PTI's cost analysis identifies a slight cost difference between the two services which is due to a difference in the type of line card used by each service.

#### RATE DESIGN

43. This section describes the various rate design proposals which are advocated by the various parties to this Docket. As a result of the rate design stipulation executed by PTI, MCC, WCC and USWC, the original rate design proposals of these parties are replaced by the proposals contained in the stipulation.

PTI

#### BASIC ACCESS AND USAGE

44. PTI originally proposed a three option local rate

structure. The three options included Budget service, Community service and Premium service. Budget service would be characterized by measured intraexchange and interexchange usage. The monthly base rates under Budget service for residence and business would be \$9.10 and \$19.20 respectively. With Community service, intraexchange usage would be flat rated; the subscriber would pay a higher monthly rate in return for unlimited intraexchange calls. Interexchange calls would still be measured under the Community option. The monthly residence and business rates under the Community option would be \$12.60 and \$25.20 respectively. The Premium option would have the highest monthly rate of the three options but would allow unlimited calling intraexchange and interexchange. The monthly premium rates for residence and business would be \$19.10 and \$38.20 respectively. Table 2 below summarizes PTI's basic local access and usage rate design proposal.

TABLE 2  
Proposed Basic Access and Usage Prices

Option	Access		Usage	
	Resident	Business	IntraExch	InterExch
Budget	\$ 9.10	\$19.20	measured	measured
Community	\$12.60	\$25.20	flat	measured
Premium	\$19.10	\$38.20	flat	flat

45. PTI's original proposal also included a single measured rate for intraexchange calls and a three tiered interexchange measured rate which would increase with distance. Table 3 below summarizes PTI's measured rate proposals.

TABLE 3  
PROPOSED MEASURED USAGE PRICES

Mileage Band	(\$/min)		Time-of-Day Discounts	
Intraexchange	\$.02	Day	Mon-Fri	8a - 5p0%
0 - 10	.05	Evening	Sun-Fri	5p - 11p25%
11 - 20	.10	Night	All other	50%
21 +	.15			

#### MULTIPARTY SERVICE

46. PTI originally proposed to eliminate multiparty service completely. Customers would be required to take single party service where facilities currently permit. Where facilities do

not currently permit the provision of single party service, customers rates would be frozen at the existing level and they would receive Community option service. When facilities become available these customers would be required to select one of the three single party rate options. PTI states that multiparty service should be eliminated for several reasons. First, it does not satisfy either PTI or industry definitions of basic access service. Second, there is a higher incidence of toll fraud on multiparty lines because these lines are not equipped with the Automatic Number Identification feature. Third, multiparty lines are precluded from certain ancillary services such as E911 and equal access presubscription. Finally, PTI asserts that the cost of providing multiparty service may exceed the cost of providing single party service due to the inability to perform remote line testing and the higher incidence of operator assistance.

#### RESIDENTIAL LIFELINE AND LINK-UP SERVICE

47. PTI proposes to begin participating in two programs designed for eligible low income ratepayers. Lifeline service reduces the customer's recurring monthly basic access rate by \$7.00 per month. The FCC waives the \$3.50 interstate subscriber line charge and the local exchange company provides a matching reduction in the local access rate.

48. Link-up service is based on an FCC program which provides a 50% reduction to the nonrecurring service and connection fee. Link-up service is funded entirely by the FCC program and does not require a rate reduction by PTI. Eligibility for both these services is based on Medicaid certification by the Montana Department of Social and Rehabilitation Services. See • 69-3-1001, et seq. MCA

#### BUSINESS ACCESS SERVICE, KEY SYSTEM SERVICE AND PBX SERVICE

49. In Final Order 5543b the Commission approved PTI's proposal to align the prices for key system service and PBX service. In the present Docket PTI proposes to further align the prices of these two services with single business access line

service (B1). PTI asserts this will simplify the price structure. PTI identifies a slight cost difference between providing B1 service and key/PBX service. B1 service has a higher cost because these customers are typically further from the central office and therefore require a longer loop. However, PTI's current Key/PBX line rate is higher than its B1 rate.

#### OFF PREMISE EXTENSIONS

50. An off premise extension (OPX) is an extension of a subscriber's service to a location which requires furnishing outside plant. PTI uses the example of a dentist who wants an extension of her business access service to her residence. PTI's tariffed price for OPXs is \$4.70 per month. PTI states that the incremental cost of providing access is applicable to providing OPX lines as well. PTI's cost study identifies an incremental access cost of about \$8.00 per month (Exhibit PTI-2 p. 22). PTI proposes to increase its price for OPX lines and create a residential/business differential. PTI originally proposed OPX prices of \$8.65 per month and \$17.30 per month for residential and business, respectively.

#### DIRECTORY ASSISTANCE

51. As is discussed above in the cost section, there are two types of DA requests which are relevant to PTI's pricing of DA. First, a customer may request a listing which is outside of the PTI service area. PTI contracts with US West to handle these requests. US West bills PTI \$.32 per request and PTI passes this charge onto the subscriber. Second, a customer may request a listing which is inside the PTI service area. PTI operators in Kalispell handle these requests and there is no charge to the subscriber; although there is a cost as discussed above in the cost section.

52. PTI originally proposed to change the pricing structure of DA such that both of the above types of DA requests are charged \$.60 per request with a two call complementary allowance. PTI stated that such a price structure would better balance the

relationship between the cost of DA and the revenue produced by DA.

#### COIN MESSAGE SERVICE

53. PTI's current price for pay station calls is \$.10 per intraexchange call. Interexchange calls are currently billed the applicable MTS rate. So that the price of pay station calls will more accurately reflect PTI's cost of providing pay station service, PTI proposes to increase the rate for intraexchange pay station calls to \$.25 per call. PTI also proposes to charge a flat \$.25 per interexchange call rather than the MTS rate. Lastly, PTI does not currently charge for DA requests originating at pay stations, however, in this proceeding PTI proposes to charge \$.25 for all pay station DA requests.

#### INTRASTATE CARRIER ACCESS CHARGES

54. PTI's original rate design proposal included a reduction to intrastate carrier access charges of \$850,000 annually. PTI proposed changes to both the structure as well as the amount of these charges. PTI's carrier access charges are comprised of three rate elements: common line, end office switching and local transport. PTI's originally proposed changes to each of these elements is discussed below.

55. The common line element currently consists of two components, a bulk bill and a per minute rate. The bulk bill is a monthly charge which is allocated among the various interexchange carriers based on their respective market shares. Since the market share is measured based on minutes of use, the bulk bill could easily be expressed as a per minute rate. PTI proposes to collapse the bulk bill into the existing per minute rate thereby simplifying the common line rate structure.

56. The existing common line per minute rate component consists of both premium and non-premium rate elements. Non-premium rate elements were originally designed when equal access was not available. Interexchange carriers other than AT&T were given price discounts to reflect what was considered an inferior



access service. Today, all PTI's end offices are equal access offices and provide the same quality of service to all interexchange carriers. Therefore, the non-premium rate elements are no longer needed and PTI proposes to eliminate them.

57. Finally, PTI proposes to bifurcate the common line per minute rate element into separate originating and terminating rates. This would allow PTI's intrastate carrier access price structure to mirror the interstate structure.

58. The above structural changes to the common line rate element are designed to be revenue neutral; although there is a price change, the level of revenues collected from this element is proposed to remain the same.

59. With respect to the end office switching rate element, PTI proposes to combine the several existing rate components into a single end office switching rate and eliminate the current rate distinction between FGA (feature group A) and FGB as well as the rate distinction between FGC and FGD. These rate distinctions are a product of the pre-equal access environment and are no longer appropriate. The entire proposed reduction in carrier access charge revenue is proposed to come from a reduction in the end office switching rates.

60. The third rate element in PTI's carrier access charges is the local transport element. PTI is proposing no change to this rate element.

#### MONTANA CONSUMER COUNSEL

61. The Montana Consumer Counsel (MCC) did not file a separate cost of service study in this proceeding. However it did analyze PTI's proposed rate design and presents alternative rate design proposals for the Commission's consideration.

62. MCC originally stated that a significant problem with PTI's filed rate design is that it increases local exchange rates by \$1.4 million. MCC also disagreed with the elimination of the existing flat local exchange rates and EAS increments under PTI's proposal; MCC's original position was that customers who are content with their existing service should not be impacted.

63. MCC recommended that, if PTI's rate design were to be

approved, the proposed Budget service should be priced lower and include thirty calls per month which would not be billed on a measured basis but rather would be included in the basic monthly rate. MCC asserted that measured rate options are not popular with consumers and, further, are not very efficient. In addition, MCC recommended that, under PTI's proposed rate design and revenue requirement, carrier access charges should not be reduced. Instead this revenue reduction should be applied to local rates.

64. MCC originally proposed two alternative rate designs. The first simply maintained the existing business and residential prices but allowed valley-wide calling. This rate design assumed almost all of MCC's estimated \$1.9 million revenue requirement reduction would be used to offset foregone interexchange toll revenues. With this proposal carrier access charges would be reduced by \$60,000.

65. MCC's second rate design proposal was very similar to PTI's; it involved three options: Measured, Community and PTI Area. MCC's Community option was existing local service including EAS arrangements. MCC proposed usage prices of either 2 cents per minute for intraexchange and 4 cents per minute for interexchange calls, or alternatively, 12 cents per completed call, intra- or interexchange. Under this proposal there would be no call allowance in the Measured service option. This proposal would reduce carrier access charges by the full \$855,000 proposed by PTI.

66. With regard to PTI's other pricing proposals, MCC supports PTI's proposed 25 cent coin message price. MCC also supports the proposed Lifeline and Link-up service proposals. MCC recommended three complimentary DA calls rather than two as PTI proposed. In addition, MCC recommended a price of 40 cents per call rather than 60 cents. Finally, MCC recommended that existing multi-party customers be grandfathered rather than forced onto single party service as facilities become available.

WHITEFISH CHAMBER OF COMMERCE

67. The Whitefish Chamber of Commerce (WCC) originally

recommended a two option rate design as an alternative to PTI's rate design proposal. WCC asserted that PTI's proposal was inappropriate for several reasons. First, PTI's budget option would include measured rates which are differentiated by mileage, duration and time of day. This would make the budget option complex and confusing for customers. Second, PTI's Community service would provide the same service as the current local service but without the EAS arrangements and at a higher price. Thus, customers choosing this option would experience a rate increase with no improvement in service. Third, PTI's premium service would be priced too high resulting in too few customers choosing the option. Fourth, PTI's proposal affording pay telephone calls unlimited interexchange calling at the proposed \$.25 coin rate would be inequitable to the majority of PTI's customers who would face toll charges on all interexchange calls.

68. WCC proposed an alternative rate design which incorporated a basic measured service option and a valley-wide flat rate option. WCC's basic measured service option would include thirty valley-wide calls per month in the monthly rate. Each call beyond the thirty, whether inter- or intraexchange, would be priced at \$.20. The Valley-wide flat rate option would include unlimited valley-wide calling at a higher monthly rate. WCC provided a range of possible rates for the above two options; actual rates would depend on the commission's revenue requirement decision. Under WCC's recommended rate design the respective residential and business monthly rates would be \$11.00 and \$22.00 for the basic measured service option and \$15.90 and \$31.80 for the valley-wide flat rate option.

69. WCC also recommended that the commission require PTI to track and report, on a monthly or quarterly basis, the revenue effects of whatever rate design is implemented until the effects stabilize. Rate adjustments could then be made to reset PTI's revenue to the revenue requirement.

#### US WEST COMMUNICATIONS

70. US West's prefiled testimony was limited to the issue of carrier access charges. USWC "strongly" supported PTI's

proposed structural changes to its carrier access charges and stated that the rate reduction is a positive step.

71. In rebuttal testimony, USWC appeared to support PTI's expanded local calling proposal. USWC also stated that the current EAS rules are no longer responsive to the needs of Montana customers. With respect to pricing, USWC stated that both flat-rated and measured calling options should be available to customers.

72. USWC also rebutted AT&T's testimony on the issue of imputation. In the context of this case, imputation would require that PTI use its tariffed carrier access charges as a cost component associated with providing toll service within the PTI serving area. USWC asserted that the proposed rate designs would convert PTI's toll service to local service thus, imputation would be unwarranted.

AT&T

73. AT&T states that it strongly supports the structural changes in carrier access charges proposed by PTI. However, AT&T believes the level of these charges must be even further reduced.

74. AT&T recommends that PTI be required to impute its tariffed carrier access charges into its toll prices. AT&T asserts that imputation of carrier access charges is necessary for two reasons. First, section 69-3-811, MCA, requires imputation when competitive services are involved. Second, competition will be hampered if PTI does not impute its carrier access charges into its toll prices.

75. According to AT&T, PTI's toll service (i.e. calls between PTI exchanges such as from Kalispell to Polson) is competitive since AT&T can provide the customer the same service. PTI controls access to the local network and, hence, to individual subscribers. AT&T pays PTI for access to the network so it can complete toll calls between individual subscribers. The charge PTI levies on AT&T for this access is called a carrier access charge. PTI's carrier access charges are higher than the cost PTI incurs to provide AT&T (or any interexchange carrier) access to the local network. AT&T states that it cannot compete

for the provision of toll service within PTI's serving area because PTI charges itself only what it costs for access to the local network while charging AT&T carrier access charges well above this cost. The solution, according to AT&T involves choosing one of three options: 1) reduce carrier access charges, 2) raise toll rates, or 3) require PTI to pay the same tariffed rate for access that AT&T must pay, i.e. imputation.

#### PUBLIC TESTIMONY

76. All parties involved, including the Commission, recognize the unprecedented level of public involvement in this case. The Public satellite hearings were well attended and the participants had a high level of understanding regarding the issues in the case. Initially, the majority of individuals and community interest groups supported the proposals of the WCC. In addition, an overwhelming majority of those who attended the public hearing held January 12, 1993, supported the rate design stipulation submitted to the Commission by several intervening parties including the WCC. Key concerns expressed by the public included keeping rates affordable for the elderly and low income, understandable prices and the ability to call throughout the Flathead valley without incurring toll charges.

#### STIPULATION

77. On December 22, 1992, PTI filed with the Commission a rate design stipulation executed by PTI, MCC, WCC and USWC. The rate design stipulation is based on a revenue requirement stipulation executed by PTI and MCC. The revenue requirement stipulation reduces PTI's revenue requirement by \$1,300,000, \$500,000 of which is applied to PTI's carrier access charges.

78. The rate design stipulation features a two option price structure for residential and business local service. The two options are "Valleywide" and "Basic" service. Valleywide service enables unlimited calling throughout PTI's Montana service area at a flat monthly rate of \$13.40 for residential customers and \$31.80 for business customers. Basic service allows for thirty calls throughout PTI's Montana service area for a flat monthly rate of \$10.65 for residential customers and \$22.00 for business

customers. For customers subscribing to Basic service, additional calls beyond the thirty included in the monthly rate are priced at \$.15 per call whether intra- or interexchange.

79. The rate design stipulation "grandfathers" multiparty service. Multiparty customers receive Valleywide service at increased rates compared to current multi-party rates. In areas where single party service is available or becomes available in the future, rates will be transitioned to single party rates in three annual adjustments. The stipulated two/four party monthly rates for residential and business customers are \$11.00/\$9.25 and \$25.55/\$23.85 respectively.

80. With respect to directory assistance, the rate design stipulation adopts a \$.40 charge per request with three free requests per month.

81. The stipulation sets the price for business off premise extensions at \$13.00 per month.

82. The stipulation adopts PTI's rate design proposals for all but the specific rates included in the stipulation. In addition, the parties to the stipulation agree that the "take rates" associated with the stipulated service options should be monitored for six months. The stipulated rates are based on an assumption that 80 percent of PTI's customers will take Valleywide service and 20 percent will take Basic service. To the extent actual take rates vary by greater than 5 percent, rates will be adjusted on an equal percentage basis to correct for any revenue surplus or shortfall. Finally, the parties to the stipulation agree that PTI's request for a waiver of the EAS rules should be granted in this case.

#### COMMISSION DECISION

##### Rate Design Stipulation

83. For the reasons set forth below, the Commission adopts the rate design proposed in the stipulation executed by PTI, MCC, WCC and USWC (except with respect to the waiver of the EAS rules).

84. First, the stipulated rates cover PTI's estimated economic costs. While the Commission chooses not to fully

embrace the cost study filed by PTI in this case, the Commission applauds PTI's efforts to construct economic costs based on avoidable and opportunity cost principles. Although not fully embracing PTI's cost study, neither is the Commission rejecting it. While AT&T and MCI maintained that a Total Service Long Run Incremental Cost (TSLRIC) methodology should be employed over PTI's unit incremental cost method, costs based on such a methodology are not part of the record in this case. Further, in USWC Docket No. 90.12.86, the most recent telecommunications rate case before this Commission in which TSLRIC costs were proposed, the Commission did not accept that methodology but deferred judgement until USWC's next rate case (see Order No. 5535g, FOF 173). Since the Commission has not addressed the merits of the TSLRIC approach it would be impossible to adopt the approach in this Docket absent further hearings. Economic costing approaches for telecommunications service are relatively new and evolving. Thus, although the Commission has certain specific concerns which are discussed below, for the purposes of this case, the Commission finds that PTI's economic cost estimates fall within a range of reasonableness. Other cost methodologies such as TSLRIC and the Building Blocks approach will be reviewed in future dockets.

85. Aside from the general question of cost methodology, the Commission has two specific concerns with PTI's cost study. First, due to PTI's use of Bellcore's SCIS model to compute switching costs and the proprietary nature of that model, the Commission staff did not conduct a detailed analysis of the underlying methodology employed by SCIS to compute incremental switch costs. As a result the Commission will not approve the cost outputs of that model. The Commission is uncomfortable with the use of "black boxes" in costing. PTI should make an effort in its next cost docket to clearly illustrate the methodology behind its switch cost estimates in a way that does not require the Commission to go to a third party to obtain the necessary information.

86. The second concern relates to PTI's exclusion of distribution cable from the calculation of incremental costs. While the Commission agrees that a cost should not be included if

it does not represent an opportunity cost or avoidable cost, the Commission is not convinced that all of what PTI excludes is unavoidable or has no opportunity cost. PTI's distinction between feeder cable, which PTI considers to have an opportunity cost, and distribution cable, appears somewhat arbitrary. It is not clear that a cable pair in a 50 pair size cable is never fungible, while a cable pair in a 100 pair size cable is always fungible. PTI should examine this issue further in its next cost docket.

87. The second reason for adopting the rate design stipulation is that the Commission finds that the stipulated rates and rate structure are in the public interest. The stipulation represents a compromise of the various interests pursued by PTI, business customers and residential consumers (represented by the WCC and MCC). USWC, the second largest purchaser of PTI access, signed the stipulation. AT&T, the largest purchaser of PTI access, does not oppose adoption of the stipulated rates (AT&T post hearing brief p 2). Further, the overwhelming majority of the public witnesses who testified at the public hearing held January 12, 1993 supported the stipulated rate design. The stipulated rates address public concerns by maintaining high quality telephone service at affordable rates, providing understandable rate options which are acceptable to customers and by providing assistance for low income customers.

88. To summarize, the Commission finds that the rate design stipulation provides rates that are in the public interest and which cover reasonable estimates of economic costs. Thus the Commission finds that the stipulated rate design should be implemented.

89. The rate design stipulation provides that for any rates not specifically addressed in the stipulation, the proposals included in PTI's original filing should be adopted. Thus, the Commission finds that by way of adopting the stipulated rate design, PTI's original proposals regarding the residential Lifeline program and Link-up service, the alignment of business access service with key system service and PBX service, the \$8.65 per month residential off premise extension price, the \$.25 per message coin service price and the structural changes to carrier



access charges are approved.

90. The Commission understands that PTI will assign customers to service options by including a ballot in the customer bill. The customer will be asked to choose a service option and return the ballot to PTI along with their bill. The Commission finds that, in the event a customer fails to return a ballot to PTI, the default service option, for both residential and business customers, will be Valleywide service.

91. Another issue the Commission wishes to address relates to PTI's staffing of operators. The Commission is well aware that advances in technology enable certain human functions to be automated at a cost savings. In addition the Commission does not intend to involve itself in the internal management decisions. However, the Commission is responsible for ensuring that customers receive high quality, affordable service. At some point, reductions in personnel may result in service deficiencies. The Commission intends to examine this issue in future PTI rate cases, and until such time encourages PTI to act responsibly and cautiously in balancing the need to provide adequate service with opportunities to reduce costs.

#### IMPUTATION

92. AT&T's and MCI's post hearing briefs assert that PTI should be required to impute the price of its access service into the rates it charges for its competing toll services (AT&T p 5. MCI p 4). PTI testified that if the rate design stipulation is adopted by the Commission, the only remaining toll traffic would be between PTI's service area and Interbel Telephone Cooperative's service area (Tr p 52). The Commission finds that the toll rates charged by PTI for traffic carried by PTI between the PTI service area and the Interbel service area may require imputation pursuant to section 69-3-811, MCA. However, the record in this case does not allow for imputation on this traffic to be implemented with this Order. No party in this proceeding proposed an imputation methodology and no analysis was conducted on which components of PTI's access service are competitive and which are monopolistic. Thus, the Commission finds that the next

docketed rate filing by PTI should include an imputation factor for the toll rates applicable to the traffic between PTI and Interbel. This does not preclude PTI from attempting to show that imputation on this traffic is not required under section 69-3-811, MCA. Further, the Commission finds that at such time as PTI may expand its service area in the state of Montana through, for example, purchase of exchanges from another local exchange company, PTI shall file proposed new toll tariffs. The filing should include a proposed imputation factor and the imputation methodology used to compute it. PTI's existing toll rates will henceforth only be applicable to traffic between PTI's service area and Interbel's service area. PTI's compliance filing made pursuant to this Order shall include revised toll tariff sheets which are limited to PTI-Interbel traffic. This Order does not preclude PTI from requesting application of the Valleywide rate structure approved in this Order to newly acquired exchanges.

#### STIPULATION BETWEEN THE PAYPHONE COMPANY AND PTI

93. At the technical hearing in the case, PTI presented a stipulation executed by PTI and The Payphone Company (TPC). The stipulation sets the monthly rate for Public Access Line (PAL) service at \$47.70 per line which is one and one half times the business Valleywide rate established in the rate design stipulation. In addition, the stipulation between TPC and PTI prices intra NPA directory assistance for PAL customers at \$.25 per request with no free call allowance. The Commission adopts the rates established in the stipulation between PTI and TPC for PAL service.

#### PTI MOTION FOR WAIVER OF EAS RULES

94. With its original application, PTI filed a motion for waiver of ARM 38.5.1301 through 38.5.1303. These rules relate to the creation of extended area service (EAS) arrangements. After review of these rules, the Commission finds that PTI's motion is unnecessary. The rules define EAS as nonoptional, unlimited flat rate calling service. ARM 38.5.1301. The stipulated Valleywide

service constitutes unlimited, flat rate calling service but it is an optional service. The stipulated Basic service is neither nonoptional nor unlimited flat rate calling service. Thus, the Commission finds that the stipulated rate design does not constitute EAS and no waiver of the rules is required in order to implement the rate design.

#### PTI MOTION FOR WAIVER OF ARM 38.5.3332 (1) (e)

95. On January 5, 1993, PTI filed a motion requesting a partial waiver of ARM 38.5.3332 (1) (e). This rule requires that, for local measured service, the customers bill must detail the total minutes. PTI contends that, since the stipulated Basic service option does not bill on a per minute basis but on a per message basis, detailing total minutes provides useless information. PTI states that the customers bill will show total messages and total charges.

96. The Commission finds that for customers subscribing to Basic service the bill should not detail total minutes but should detail the number of messages as well as the other information required by ARM 38.5.3332 (1) (e). The Commission grants PTI's motion for waiver of ARM 38.5.3332 (1) (e) as it relates to total minutes. The Basic Service option is a different form of local measured service; and PTI will comply with the general intent of this rule by including the number of messages over 30 on the bills, and the charges incurred therefor.

#### PTI OBJECTION TO ADMISSION OF STAFF DATA REQUESTS/DUE PROCESS

97. At the hearing on January 13, 1993, PTI entered an objection to staff's motion to introduce the following staff data requests: PSC-43, 48, 49, 51, 57, 59, 61, 68, 71(d), 72, 74, 78, 87, 100, and 104. On February 1, 1993, PTI filed a Brief in support of its objection.

98. In response to PTI's objection, the Commission first notes that PTI characterizes staff's motion as a "blanket" admission of data responses. In fact, the responses subject to PTI's objection constitute only 15 out of 166 total staff data

requests in this Docket. Prior to the hearing, staff provided PTI a list of the data requests it intended to introduce.

99. Secondly, most of the data requests subject to PTI's objection relate to PTI cost of service studies and methodology. The Commission has an obligation to inquire into the reasonableness of PTI's cost studies in this case. Recall, that it has been many years since PTI's last rate case before this Commission. And, in 1991, a specific statutory provision was enacted, addressing the relationship between costs and rates of telecommunications services. Section 69-3-811, MCA. Furthermore, this Order does not reject PTI's cost of service studies.

100. The Commission has addressed objections to the introduction of staff data requests on many previous occasions, and has consistently overruled those objections. The grounds raised by PTI are essentially the same as those argued previously. The Commission finds that PTI has provided no reason why a ruling on its objection herein should differ from previous rulings on this issue. The Commission adopts by reference herein paragraphs 8-23 of Order No. 5399b in MDU Docket No. 88.11.53, and paragraphs 15-20 of Order No. 5484k in MPC Docket No. 90.6.39, as its response to PTI's objection in this Docket. See also, USWC Order No. 5535g, paragraphs 292-297, Docket No. 90.12.86. Staff introduction of evidence is clearly permitted by Section 69-2-102, MCA, ARM 38.2.601(n) and 38.2.3902(1). Therefore, PTI's objection to staff introduction of evidence is overruled, and the responses are admitted.

101. The Commission notes that PTI's objection was not based upon any provision of the Montana Rules of Evidence. PTI did not argue that the responses were irrelevant to this proceeding.

102. The Commission also notes that it recently concluded Docket No. 90.7.44, which examined the Commission staff's role, including the admission of discovery, in conjunction with fairness, due process and procedural issues. PTI was a party in that Docket. The Commission decisions therein included:

a) The issuance of a Notice of Commission Action, Service Date: December 31, 1992, describing the procedural changes to be implemented in future cases.

b) Order No. 5684, making general findings and closing Docket No. 90.7.44, and

c) The initiation of a rulemaking proceeding, establishing a pre-filing requirement. 1993 Montana Administrative Register 6, MAR Notice No. 38-2-108, January 14, 1993.

103. The Commission's decisions in Docket No. 90.7.44 did not include a finding that the Commission's previous procedures violated legal due process requirements. The Commission determined only that there are aspects of the existing procedure that have a potential for violating due process or might simply be unfair. The Commission anticipates changes to its procedures constituting a serious effort to improve its ratemaking procedures and diminish the potential for unfairness. See Order No. 5684, paragraph 3. Obviously, due to the temporal proximity of the Commission's decisions in Docket No. 90.7.44 and the PTI hearing, few of the planned improvements could be implemented. However, PTI's next Docket before the Commission will benefit from the improved process.

#### CONCLUSIONS OF LAW

1. PTI provides regulated telecommunications services within the State of Montana, Section 69-3-803, MCA, and is a regulated public utility pursuant to Montana law. Section 69-3-101, MCA.

2. PTI is subject to the jurisdiction, supervision and control of the Montana Public Service Commission. Section 69-2-102, MCA.

3. The PSC has provided adequate public notice and an opportunity to be heard herein, pursuant to the Montana Administrative Procedure Act. Title 2, Chapter 4, MCA.

4. The revenue requirement, rate design and rate levels approved in this Order are just, reasonable, nondiscriminatory, and consistent with the applicable provisions of the Montana Telecommunications Act. Section 69-3-201, 69-3-330, and 69-3-801, et seq., MCA.

#### ORDER

IT IS HEREBY ORDERED that:

1. The revenue requirement, rate design and revenue levels of PTI, as modified in this Order, are hereby approved.

2. The Revenue Requirement Stipulation signed by PTI and MCC, filed on December 18, 1992, is approved.

3. The Rate Structure Stipulation signed by PTI, MCC, USWC, and the Whitefish Chamber of Commerce, filed December 31, 1992, is approved, except with respect to the EAS rules (see paragraph 94 above and paragraph 8 below).

4. The Stipulation submitted January 13, 1993, signed by PTI and the Payphone Company, is approved.

5. PTI's objection to the introduction of staff data requests is overruled.

6. PTI's toll tariffs shall be expressly limited to toll traffic between PTI's current exchanges and Interbel Telephone Cooperative's current exchanges.

7. PTI's motion for a waiver of the Commission's LMS billing rule, ARM 38.5.3332(1)(e) is granted; however, PTI's bills for Basic Service must include a count of the number of calls over the 30 call allowance and the charges therefor.

8. In response to PTI's motion for a waiver of the Commission's Extended Area Service (EAS) rules, ARM 38.5.1301 through 38.5.1303, the Commission holds that a waiver is not necessary to implement the approved rate structure, because the approved structure does not constitute EAS as defined in ARM 38.5.1301.

9. The Commission holds that OPEBs accounting treatment pursuant to FAS 106 is approved subject to the restrictions and conditions contained in this Order and the most recent USWC order. Findings of Fact Nos. 10-19 above, and Findings of Fact Nos. 54-84 of Order No. 5535g, Docket No. 90.12.86, are hereby incorporated herein by this reference.

10. The six month monitoring report (and any appropriate rate filing) regarding the "take rate" of the new rate structure must be filed with the Commission no later than 45 days after the new rates have been in effect for six months.

11. PTI will provide reasonable notice of this impending rate structure change to its customers, and will give them a reasonable opportunity to make a voluntary selection from the choices available. For local access service, the default option shall be valleywide service (that is, if a customer fails to

express his choice to PTI within a reasonable time).

12. PTI is ordered to file compliance tariffs with the Commission within twenty (20) days from the service date of this Order, which incorporate all of the decisions herein. Copies of all compliance tariffs must also be served by PTI on all intervenors. Authority to review and approve the compliance tariffs is hereby delegated to the Commission staff. The compliance tariffs will be reviewed and subject to approval by staff, with an appropriate subsequent effective date.

DONE AND DATED at Helena, Montana, this 8th day of March, 1993, by a 3 to 0 vote.

BY ORDER OF THE MONTANA PUBLIC SERVICE COMMISSION

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BOB ROWE, Vice Chairman

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DAVE FISHER, Commissioner

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DANNY OBERG, Commissioner

NOTE: Any interested party may request that the Commission reconsider this decision. A motion to reconsider must be filed within ten (10) days. See 38.2.4806, ARM.

[SEE EXHIBITS IN ORIGINAL DOCUMENT]